

IN THE CLAIMS:

Please cancel claims 1-14.

Please add new Claims 15-23

1-14. (Cancelled)

15. (New) A process for producing basic cobalt(II) carbonate agglomerates, comprising:

(a) reacting (1) an aqueous solution of cobalt salts of general formula CoX_2 , where X is selected from the group consisting of Cl^- , NO_3^- , $\frac{1}{2} \text{SO}_4^{2-}$ and mixtures thereof with (2) an aqueous solution or suspensions of at least one of alkali, ammonium carbonates and hydrogen carbonates at temperatures between 40 and 100°C; and

(b) filtering off resulting basic cobalt(II) carbonate agglomerates formed in step (a) and washing the agglomerates until they are neutral and free from salts.

16. (New) A process for preparing an agglomerated cobalt(II) hydroxide, comprising reacting cobalt(II) carbonate agglomerates, in suspension, with at least one component selected from the group consisting of aqueous alkaline liquors, ammonia and mixtures thereof.

17. (New) The process of Claim 16, wherein the cobalt(II) hydroxide includes spheroidally agglomerated, polygonal, lamellar primary particles which have average diameters of 0.3 μm to 1.5 μm and diameter to thickness ratios between 3 and 15.

18. (New) The process of Claim 17, wherein the spheroidal agglomerates have an average diameter of 3 – 50 μm .

19. (New) The process of Claim 17, wherein the spheroidal agglomerates have an average diameter of 5 - 20 μm .

20. (New) The process of Claim 16, wherein the cobalt(II) hydroxide has tap densities of $\geq 1\text{g/cm}^3$.

21. (New) The process of Claim 16, further including calcinating the carbonate agglomerates.

22. (New) The process of Claim 16, further including reacting the agglomerated carbonate with a reactant that causes production of a uniform number of crystals.

23. (New) The process of Claim 16, wherein the reactant comprises glacial

acetic acid.

18. (New) The process of Claim 16, wherein the reactant comprises phosphoric acid.

19. (New) The process of Claim 16, wherein the reactant comprises oxalic acid.

20. (New) Basic cobalt (II) carbonate, agglomerated from fine primary particles and of general composition $\text{Co}[\text{OH}]_2[\text{CO}_3]_{1-a}$, where $0.1 \leq a \leq 0.9$, wherein the agglomerates have a spheroidal habit and the average agglomerate diameter is 3 to 50 μm ,

wherein the agglomerates include tap densities of $\geq 1.6 \text{ g/cm}^3$ and bulk densities of $\geq 1.2 \text{ g/cm}^3$,

made by reacting aqueous solutions of cobalt salts of the general formula CoX_2 , where X is selected from the group consisting of Cl^- , NO_3^- and $\frac{1}{2} \text{SO}_4^{2-}$ with aqueous solutions or suspensions of carbonates selected from the group consisting of alkali carbonates, ammonium carbonates and hydrogen carbonates at temperatures between 40 and 100°C, the reactants being mixed intensively with residence time of mixing operation, at said temperature range, of 0.5 to 10 hours, filtering the resulting basic cobalt (II) carbonates and subsequently washing until they are neutral and free from salts,

wherein the intensive mixing is accomplished by stirring at a speed of about 600 rpm.

21. (New) The Basic cobalt (II) carbonate according to Claim 20, wherein the average agglomerate diameter is 5 - 20 μm .

22. (New) Basic cobalt (II) carbonate, agglomerated from fine primary particles and of general composition $\text{Co}[\text{OH}]_2[\text{CO}_3]_{1-a}$, where $0.1 \leq a \leq 0.9$, wherein the agglomerates have a spheroidal habit and the average agglomerate diameter is 3 to 50 μm ,

as made by reacting aqueous solutions of cobalt salts of the general formula CoX_2 , where X is selected from the group consisting of Cl^- , NO_3^- and $\frac{1}{2} \text{SO}_4^{2-}$ with aqueous solutions or suspensions of carbonates selected from the group

consisting of alkali carbonates, ammonium carbonates and hydrogen carbonates at temperatures between 40 and 100°C, the reactants being mixed intensively with residence time of mixing operation, at said temperature range, of 0.5 to 10 hours, filtering the residue basic cobalt (II) carbonates and subsequently washing these until they are neutral and free from salts,

wherein the intensive mixing is accomplished by stirring at a speed of about 600 rpm.

23. (New) The Basic cobalt (II) carbonate according to Claim 22, wherein the average agglomerate diameter is 5 - 20 μm .